

What Is Claimed Is:

1. A method for processing medical information,
comprising the steps of:

receiving a medical claim from a health care provider
5 which is to be submitted to a target payer;

automatically classifying the medical claim using a
classification model that is trained to predict a
disposition of the claim by the target payer; and

directing the medical claim for further processing
10 based on a classification of the medical claim.

2. The method of claim 1, wherein the step of
automatically classifying the medical claim comprises
determining a probability of the medical claim being
15 accepted or rejected by the target payer.

3. The method of claim 1, wherein the step of
automatically classifying the medical claim comprises
classifying the medical claim as accepted or classifying
20 the medical claim as rejected and a basis for rejecting the
medical claim.

4. The method of claim 3, wherein the medical claim
can be classified as rejected as not covered by the payer.

5. The method of claim 3, wherein the medical claim can be classified as rejected as exceeding a maximum limit of the target payer.

5 6. The method of claim 2, wherein the medical claim can be classified as rejected for requiring further information or an attachment by the target payer.

10 7. The method of claim 2, wherein the medical claim can be classified as rejected as including an incorrect combination of charges.

15 8. The method of claim 1, wherein the step of directing the medical claim comprises sending the medical claim to the target payer if the medical claim is classified as being accepted.

20 9. The method of claim 1, wherein the step of directing the medical claim comprises sending the medical claim back to the provider if the medical claim is classified as being rejected.

10. The method of claim 1, wherein the step of directing the medical claim comprises automatically modifying the medial claim if the medial claim is classified as being rejected.

5

11. The method of claim 1, further comprising automatically training a classification model of a target payer using training data derived from a history of past resolved medical claims associated with the target payer.

10

12. The method of claim 1, wherein the training data further comprises domain-specific criteria in a domain knowledge base.

15

13. The method of claim 1, further comprising automatically updating a trained classification model associated with a target payer using data derived from final dispositions of medical claims by the target payer.

20

14. The method of claim 13, wherein automatically updating is performed continuously.

15. The method of claim 13, wherein automatically updating is performed periodically.

16. The method of claim 13, wherein automatically updating comprises re-training new classification model

17. The method of claim 1, wherein the classification
5 model is trained to analyze one or more of a plurality of different target payers of the health care provider.

18. The method of claim 1, wherein the classification
10 model is trained to analyze one or more of a plurality of departments of the target payer.

19. The method of claim 1, wherein the classification model is unique to the health care provider.

15 20. The method of claim 1, wherein the classification model is unique to the target payer.

21. The method of claim 1, wherein the classification
20 model is unique to the healthcare provider/target payer relationship.

22. The method of claim 1, wherein the classification model is unique to one or more target payers in a geographical region.

23. The method of claim 1, wherein the classification model is unique to a medical domain.

24. The method of claim 1, wherein the step of
5 automatically classifying the medical claim comprises predicting an expected final compensation for medical claims.

25. The method of claim 24, wherein the expected
10 final compensation for the medical claims is provided as a distribution of compensations with associated probabilities.

26. The method of claim 1, wherein the step of
15 automatically classifying further comprises predicting an expected time required to accept medical claims, including an expected time required to provide additional information, or an expected time to modify the medical claims.

20

27. The method of claim 26, wherein the expected times are provided as a probability distribution with associated probabilities.

28. The method of claim 24, wherein the step of automatically classifying further comprises predicting expected times required to accept the medical claims, including an expected time required to provide additional information, or an expected time to modify the medical claims.

29. The method of claim 28, wherein the expected compensation and times are provided as a probability distribution with associated probabilities.

30. A program storage device readable by a machine, tangibly embodying a program of instructions executable on the machine to perform method steps for processing medical information, the method steps comprising:

receiving a medical claim from a health care provider which is to be submitted to a target payer;

automatically classifying the medical claim using a classification model that is trained to predict a disposition of the claim by the target payer; and

directing the medical claim for further processing based on a classification of the medical claim.

31. A tool for analyzing medical claims, comprising:
an interface for inputting a medical claim; and
an engine that automatically classifies the medical
claim using a classification model that is trained to
predict a disposition of the medical claim by a target
payer, and direct the medical claim for further processing
based on a classification of the medical claim.

32. A method for processing medical information,
5 comprising the steps of:

receiving a plurality of medical claims from a health
care provider that are to be submitted to one or more
target payers; and

10 automatically predicting an expected cash flow for
each medical claim, or a subset of the medical claims,
using one or more classification models that are trained to
predict a disposition of the medical claims by the one or
more target payers.

33. The method of claim 32, wherein automatically
predicting an expected cash flow comprises:

predicting an expected compensation for each medical
claim;

predicting a resolution time for resolving each
medical claim; and

determining the expected cash flow associated with the
medical claims by summing the expected compensation and
resolution times for the medical claims.